Practice: 644 - Wetland Wildlife Management

Scenario: #1 - Wildlife Structure - Wood Duck

Scenario Description:

This scenario covers all wetland habitats, that are not covered under 643, that need installation of wood duck nesting structures when habitat assessment indicates Inadequate Habitat for Fish or Wildlife-habitat degradation. Intensity is the number of structures to be installed per acre. To prevent nest dumping, woodduck boxes should not be installed within sight of each other. Therefore it is expected that there will no more than 1 structure per acre. Complexity is defined by the combination of skill level, equipment needed and ease of accesability for createing and installing these structures. For this scenario the complexity would include: general labor with supervision and common hand tools and/or light to medium equipment. In order for the habitat limiting factor to be improved the participant has to for go a certain amount of production or complete deferment. Facilitating practices may include but not limited to: 391, 646 and 666. The intensity can range from <1 structure per acre depending on complexity of the scenario site. All the needed wildlife structures can be installed within a half mile of a driveable road and the terrain can range from gentle to difficult.

Before Situation:

A habitat assessment (using State Office approved habitat assessment method, protocol or tool) has indicated a need for wood duck nesting boxes due to the limiting factor of inadequate habitat for fish and wildlife. Habitat limiting factors include quality, quantity and continuity of forage, cover, shelter, space and water avalability.

After Situation:

Installation of wood duck nesting boxes bring the identified deficient habitat limiting factors up to planning criteria.

Scenario Feature Measure: 1 structure / acre

Scenario Unit: Acre

Scenario Typical Size: 50

Scenario Cost: $8,328.50 **Scenario Cost/Unit:** $166.57

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
	1142				12	
	1145				6	
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	$31.56	25	$789.00
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$17.54	75	$1,315.50
Materials						
Post, Wood, CCA treated, 6" x 12-14'	13	Wood Post, Line/End 6" X 12-14', CCA Treated. Includes materials and shipping only.	Each	$26.08	50	$1,304.00
Predator Guard	1461	Predator guards (i.e. stove pipes, cone, hole guard, etc.) for habitat boxes. Materials only. Includes material and shipping only.	Each	$28.58	50	$1,429.00
Habitat Box, waterfowl	1449	Wood Duck Box, typically 24" x 11" x 12" with 4" wide oval entrance, single. Includes material and shipping only.	Each	$69.82	50	$3,491.00

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Scenario: #2 - Monitoring, Management

Scenario Description:

Setting is any lands with the potential to provide wetland wildlife habitat and that potential is not currently being captured. The identified wetland wildlife habitat limiting factors can be restored, enhanced or created, with the application of this practice alone, or in combination with other supporting and facilitating practices. Monitoring will be used to determine if the conservation system meets or exceeds the minimum quality criteria for the targeted wildlife. Management will be implemented based on the findings of the habitat assessment and monitoring.Wetland wildlife habitat management and monitoring needed to treat the resource concerns may require training, no qualitative data assessment, no water quality monitoring and is medium in complexity and intensity. Examples of prescribed monitoring, include but are not limited to: photo points taken, documentation of annual management, remote cameras, documenting wildlife sightings, documenting location and presence of invasive species and condition of vegetative and structural treatments and occurance of damage to habitat. The planner will specify locations and identify the methods to the customer who will implement the monitoring and management plan. Facilitating practices may include but not limited to: 314, 315, 327, 342, 380, 384, 390, 391, 422, 472, 490, 511, 528, 550, 612, 647, 650, 654, 660, 666.

Before Situation:

Existing degraded plant conditions and resulting inadequate habitat for fish and wildlife have resulting in low use of the area by target and associated wetland wildlife species.

After Situation:

Based on the results of a State-approved upland wildlife habitat assessment process, the application of wetland wildlife habitat management efforts and prescribed monitoring have been implemented. With the application of this practice alone, or in combination with other supporting and facilitating practices, the inadequate wetland wildlife habitat conditions have addressed. Monitoring has maximized the benefits of the needed upland wildlife habitat treatment efforts.

Scenario Feature Measure: Acres Managed and Monitored.

Scenario Unit: Acre

Scenario Typical Size: 100

Scenario Cost: $451.40 **Scenario Cost/Unit:** $4.51

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
	1146				1	
Equipment/Installation						
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	$27.72	0.5	$13.86
Satellite imagery, aerial photography, infrared	966	Infrared imagery	Acre	$0.16	100	$16.00
Labor						
Specialist Labor	235	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	$88.34	3	$265.02
Mobilization						
Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	$156.52	1	$156.52

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Scenario: #3 - Topoggraphic Feature Creation, High

Scenario Description:

Corrective measures will require the use of equipment 150 HP in size or larger due to current site conditions and implementation techniques. The setting is all landuses, but typically is on lands used for the production of agricultural products, where the slope gradient is less than two percent and soils that are not excessivly drained, that are being converted back to wetland habitats for fish and wildlife. The State-approved habitat evaluation or appraisal found that a limiting factor for wetland wildlife is the absence of sufficient variability in microtopograpic releif in the area. The construction of low intensity and low complexity topographic features will provide for diverse soil hydrologic conditions needed to treat the degraded plant condition and/or inadequate habitat for wetland wildlife. The contruction of micro and macro topographic featuires will require the use of equipment 150 HP in size or larger due to current site conditions and implementation techniques. Appropriate equipment (i.e. – Dozer, Excavator, etc) will be used to construct planned topographic features essential for identified species.

Before Situation:

The site lacks sufficient micro- and macrotopographic features needed for optimal wetland wildlife habitat for target species. Typically the site has been previously manipulated and utilized for agricultural production. With the loss of ridges and swales and other topographic features scattered throughout the site, both plant and animal species that are dependent on the microenvironments created by these features are no longer present or are in decline within the planning unit.

After Situation:

Appropriate equipment (i.e. – Dozer, Excavator, etc) was used to construct planned topographic features essential for identified species. As a result of the installation, adequate habitat structure such as micro and macro topographic features will provide for diverse soil hydrologic conditions needed to treat the degraded plant condition and/or inadequate habitat for wetland wildlife.

Scenario Feature Measure: number and size of constructed features

Scenario Unit: Acre

Scenario Typical Size: 100

Scenario Cost: $394,311.54 **Scenario Cost/Unit:** $3,943.12

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
	1145				62	
	1144				248	
Acquisition of Technical Knowledge						
Training, Workshops	294	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	$41.42	1	$41.42
Equipment/Installation						
Hydraulic Excavator, 2 CY	932	Track mounted hydraulic excavator with bucket capacity range of 1.5 to 2.5 CY. Equipment and power unit costs. Labor not included.	Hour	$172.10	1000	$172,100.00
Satellite imagery, aerial photography, infrared	966	Infrared imagery	Acre	$0.16	100	$16.00
Dozer, 200 HP	928	Track mounted Dozer with horsepower range of 160 to 250. Equipment and power unit costs. Labor not included.	Hour	$168.29	1000	$168,290.00
Labor						
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	$22.13	2000	$44,260.00
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	$31.56	248	$7,826.88
Mobilization						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	$444.31	4	$1,777.24

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Scenario: #5 - Mottled Duck Habitat, wetland component-activity #5

Scenario Description:

Used on adjacent grassland and wetland components to manipulate water levels to provide nesting and brooding habitat for mottled ducks and wintering habitat for other water birds through specific management objectives.

Before Situation:

Currently these agricultural fields do not provide habitat for waterfowl/shorebirds. Grassland and wetland components are typically not managed adequately to provide suitable nesting and brooding habitat for mottled ducks.

After Situation:

Wetland components are managed so that shallow water habitat is available from February 1 through July 31, with no more than 50% of the area covered by tall, emergent vegetation.

Scenario Feature Measure:

Scenario Unit: Acre

Scenario Typical Size: 250

Scenario Cost: $2,104.80 **Scenario Cost/Unit:** $8.42

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
	1142				15	
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$17.54	120	$2,104.80

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Scenario: #6 - Close Risers by Nov.1-Feb.15

Scenario Description:

This scenario addresses inadequate habitat for fish and wildlife on cropland and/or moist soil areas. The resource concern is addressed by providing shallow water habitat for wildlife such as shorebirds, waterfowl, wading birds, mammals, fish, reptiles, amphibians, and other species that require shallow water for at least part of their life cycle. Sites are flooded up to a depth of 18" with an average depth of 9". Water is provided by placing boards in risers of water control structures by November 1 to catch precipitation. Removal of boards after February 15 allows area to drain. Associated practices are P.C. 587, Structure for Water Control and P.C. 356, Dikes.

Before Situation:

There is inadequate habitat to provide optimum resting, nesting, and feeding habitat for waterfowl, shorebirds, and other wildlife (amphibians, reptiles, mammals, invertebrates, etc.).

After Situation:

A single or series of shallow water areas that are managed per standard and specification. Water levels are regulated to maintain temporary wildlife habitat. Water control structures are closed by November 1 and held through February 15 to catch rainfall. Depths are based on actual rainfall for that year; based on climatic data, assume enough rainfall to average 6-8 inches. The producer manages the timing and duration of water required for different species of waterfowl/shorebirds. This management will benefit wildlife while minimizing nutrient export and aquifer depletion. Flooded sites vary from mudflats to water depths of 18" with an average depth of 9". The hydrologic conditions of ponding and saturation (frequency, depth, duration, timing) provides optimum seasonal habitat for waterfowl, shorebirds, and other wildlife (amphibians, reptiles, mammals, invertebrates, etc.). If needed and dikes or water control structures are not currently present on the fields planned to be flooded, these practices may be planned for the same fields and cost shared under Structure for Water Control (587) and Dike (356). Depending on local conditions, other Conservation Practices may also be required.

Scenario Feature Measure:

Scenario Unit: Acre

Scenario Typical Size: 15

Scenario Cost: $105.24 **Scenario Cost/Unit:** $7.02

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
	1142				3	
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$17.54	6	$105.24